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August 12, 2005

BY OVERNIGHT DELIVERY AND E-FILE

Mary L. Cottrell, Secretary
Department of Telecommunications and Energy
One South Station
Boston, MA 02110

Re: Bay State Gas Company, D.T.E. 05-27

Dear Ms. Cottrell:

Enclosed for filing, on behalf of Bay State Gas Company ("Bay State"), please find Bay State's responses to the following Record Requests:

From the Attorney General:

RR-AG-94

From the Department:

RR-DTE-105-DGC (Revised)

Please do not hesitate to telephone me with any questions whatsoever.

Very truly yours,

Patricia M. French

cc: Per Ground Rules Memorandum issued June 13, 2005:

Paul E. Osborne, Assistant Director – Rates and Rev. Requirements Div. (1 copy)
A. John Sullivan, Rates and Rev. Requirements Div. (4 copies)
Andreas Thanos, Assistant Director, Gas Division (1 copy)
Alexander Cochis, Assistant Attorney General (4 copies)
Service List (1 electronic copy)

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO
RECORD REQUESTS FROM THE ATTORNEY GENERAL
D.T.E. 05-27

Date: August 12, 2005

Responsible: Danny G. Cote, General Manager

RR-AG-94: Provide a schedule reflecting inspections by the Department, over the last four years, of Bay State's LNG facilities.

Response: Bay State Gas does not have a formal process of tracking Department inspections. Bay State Gas only tracks inspections when recommendations or violation notices are received in writing.

Below, are the dates of inspections, along with, the inspector's name, based on follow-up letters from the inspector, for the past four years.

Inspection Date	Inspector Name
3/29/05	Richard Wallace
2/24/05	Richard Wallace

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO
RECORD REQUESTS FROM THE D.T.E.
D.T.E. 05-27

Date: August 12, 2005

Responsible: Danny G. Cote, General Manager

Revised Response

RR-DTE-105-DGC: Regarding response to DTE-3-21, calculate the total incremental dollar costs for the project in List #1. Include rough capacity calculations provided by engineer.

Response: The project identified in list one (Short St. Taunton) described the replacement of 4381 feet of 2" bare steel main with 6" plastic main. The incremental portion of the cost per foot to replace the 2" bare steel with 2" coated cathodically protected steel (which would be like-for-like replacement) would be $10.52 based on 2005 construction and material costs, (see Attachment RR-DTE-105, Section 1, Column 2" CS, Row "Total Material & Cont. Charges").

The incremental portion of the cost for 6" plastic is $11.63 per foot (see Attachment RR-DTE-105, Table 1, Column 6" PE, Row "Total Material & Cont. Charges").

Thus the cost per foot difference between 2" steel and 6" PE replacement is $1.11 per foot, or $4,891.91.

Regarding Capacity, the flow through 1 mile of 2" steel at 200 PSIG is 80,522 CFH (see attachment RR-DTE-105, Table 4, (B) Steel Mains, Column 200 psig, for 2" steel).

The flow through 6" PE at 99 PSIG is 582,295 CFH, (see Attachment RR-DTE-105, Table 4, (A) PE Mains, Column 99 psig, for 6" PE), resulting in an increase in capacity of 501,733 CFH.

Therefore, at an incremental cost of $4,891.91 (or $1.11 per foot), which was roughly 3% of the total project cost, the capacity of these facilities was increased by a factor of 7.

BAY STATE GAS COMPANY
COST ANALYSES, STEEL VS PE MAINS

TABLE (1): MATERIAL & CONTRACTOR CHARGES

DESCRIPTION	2" PE ($/ft)	2" CS ($/ft)	4" PE ($/ft)	4" CS ($/ft)	6" PE ($/ft)	6" CS ($/ft)	8" PE ($/ft)	8" CS ($/ft)
Material	$0.51	$3.07	$1.72	$8.21	$3.73	$9.25	$6.34	$14.23
Contractor Charges	$6.25	$7.45	$6.60	$8.10	$7.90	$9.20	$10.75	$11.45
Total Material & Cont. Charges	$6.76	$10.52	$8.32	$16.31	$11.63	$18.45	$17.09	$25.68

TABLE (2): COST DIFFERENCES BETWEEN VARIOUS SIZES & TYPES

$ Difference = (Material + Contractor Charges) of more expensive main - (Material + Contractor Charges) of cheaper main

Flow Difference = (Flow @ 200 psig Steel main) - (Flow @ 99 psig PE main)

MAIN SIZES	COST DIFFERENCES ($)	FLOW DIFFERENCES (CFH)
2" Steel vs. 4" PE	-$2.20	-122,411.81
2" Steel vs. 6" PE	$1.11	-501,773.11
4" Steel vs. 6" PE	-$4.68	-105,752.68
4" Steel vs. 8" PE	$0.78	-717,257.18
6" Steel vs. 8" PE	-$1.36	1,969,988.17

NOTE: **(-) Cost Difference means:** it is more expensive to replace with a steel main than a PE main
(+) Cost Difference means: it is more expensive to replace with a PE main than a steel main
(-) Flow Difference means: the flow capacity of a steel main @ 200 psig is less than a PE main @ 99 psig
(+) Flow Difference means: the flow capacity of a steel main @ 200 psig is greater than a PE main @ 99 psig

BAY STATE GAS COMPANY
COST ANALYSES, STEEL VS PE MAINS

TABLE (3): INTERNAL DIAMETER DIFFERENCES BETWEEN VARIOUS SIZES & TYPES

PIPE SIZE	ID (Steel Main)	ID (PE MAIN)	Steel Wall thickness
2" MAIN	2.067	1.943	0.154
4" MAIN	4.026	3.682	0.237
6" MAIN	6.25	5.421	0.188
8" MAIN	8.187	7.055	0.219

TABLE (4): GAS FLOW VOLUME PER 1 MILE

(A) PE MAINS

PE Main Sizes	@ 60 psig (CFH)	@ 99 psig (CFH)
2" PE MAIN	21,647.43	35,552.11
4" PE MAIN	123,565.20	202,934.20
6" PE MAIN	354,555.60	582,295.50
8" PE MAIN	726,896.10	1,193,800.00

(B) STEEL MAINS

STEEL Main Sizes	@ 60 psig (CFH)	@ 99 psig (CFH)	@ 200 psig (CFH)
2" STEEL MAIN	24,414.61	39,444.76	80,522.39
4" STEEL MAIN	144,489.09	233,439.66	476,542.82
6" STEEL MAIN	466,926.72	754,376.75	1,539,981.80
8" STEEL MAIN	959,269.28	1,549,815.87	3,163,788.17